

INTERNATIONAL SEARCH REPORT

International application No.

PCT/FI 2004/000589

A. CLASSIFICATION OF SUBJECT MATTER

IPC7: B02C 7/12, D21D 1/30, D21B 1/14

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC7: B02C, D21D, D21B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

SE,DK,FI,NO classes as above

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

EPO-INTERNAL, WPI DATA, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5467931 A (DODD), 21 November 1995 (21.11.1995), column 1, line 5-8, column 2, line 52-54, column 4, line 51-62, column 3, line 1-16; fig 1,6,7; claims 1-8; abstract	1-13,17, 19-28
A	--	14-16,18
A	US 4023737 A (LEIDER ET AL), 17 May 1977 (17.05.1977), column 1, line 5 - line 10, figure 1, claims 1-8, abstract	1-28
A	--	
A	US 5893525 A (GINGRAS), 13 April 1999 (13.04.1999), figures 1,2, claims 1-18, abstract	1-28
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 Further documents are listed in the continuation of Box C. See patent family annex.

* Special categories of cited documents:	
"A"	document defining the general state of the art which is not considered to be of particular relevance
"E"	earlier application or patent but published on or after the international filing date
"L"	document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
"O"	document referring to an oral disclosure, use, exhibition or other means
"P"	document published prior to the international filing date but later than the priority date claimed
"T"	later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"X"	document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"Y"	document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"&"	document member of the same patent family

Date of the actual completion of the international search

17 January 2005

Date of mailing of the international search report

19-01-2005

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PCT/FI 2004/000589

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	SE 513807 C2 (VALMET FIBERTECH AB), 6 November 2000 (06.11.2000), figures 1-7, claims 1-7, abstract --	1-28
A	US 5476228 A (UNDERBERG), 19 December 1995 (19.12.1995), figures 1-7, claims 1,2, abstract --	1-28
A	US 6607153 B1 (GINGRAS), 19 August 2003 (19.08.2003), figures 1-7, claims 1-14, abstract -- -----	1-28

INTERNATIONAL SEARCH REPORT

Information on patent family members

31/12/2004

International application No.

PCT/FI 2004/000589

US	5467931	A	21/11/1995	AU	1406995	A	04/09/1995
				WO	9522653	A	24/08/1995
				ZA	9501416	A	10/01/1996

US	4023737	A	17/05/1977	NONE			
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US	5893525	A	13/04/1999	BR	9806536	A	26/12/2000
				CA	2237106	A,C	01/01/1999

SE	513807	C2	06/11/2000	AU	760157	B	08/05/2003
				AU	4154000	A	09/10/2000
				BR	0009123	A	18/12/2001
				CA	2362667	A	28/09/2000
				CN	1344181	T	10/04/2002
				EP	1185369	A	13/03/2002
				JP	2002540298	T	26/11/2002
				NO	20014525	A	15/11/2001
				NZ	513997	A	28/03/2003
				SE	9901020	A	20/09/2000
				US	6592062	B	15/07/2003
				WO	0056459	A	28/09/2000

US	5476228	A	19/12/1995	AU	1940195	A	25/09/1995
				BR	9506971	A	09/09/1997
				CA	2185001	A,C	14/09/1995
				DE	69501554	D,T	04/06/1998
				EP	0749507	A,B	27/12/1996
				SE	0749507	T3	
				ES	2113190	T	16/04/1998
				FI	108153	B	00/00/0000
				FI	963500	A	06/09/1996
				JP	9505364	T	27/05/1997
				WO	9524528	A	14/09/1995

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Information on patent family members

31/12/2004

International application No.

PCT/FI 2004/000589

US	6607153	B1	19/08/2003	AU	742531	B	03/01/2002
				AU	9199498	A	14/03/2000
				BR	9815988	A	02/05/2001
				CA	2337636	A	02/03/2000
				DE	69808524	D,T	26/06/2003
				EP	1112123	A,B	04/07/2001
				SE	1112123	T3	
				NO	20010528	A	31/01/2001
				NZ	509650	A	26/09/2003
				WO	0010710	A	02/03/2000

PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT
(PCT Article 18 and Rules 43 and 44)

REC'D 25 JAN 2005

WIPO PCT

Applicant's or agent's file reference 2041322PC/nu	FOR FURTHER ACTION see Form PCT/ISA/220 as well as, where applicable, item 5 below.	
International application No. PCT/FI 2004/000589	International filing date (<i>day/month/year</i>) 6 October 2004	(Earliest) Priority Date (<i>day/month/year</i>) 6 October 2003
Applicant Metso Paper, Inc et al		

This international search report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This international search report consists of a total of 3 sheets.

It is also accompanied by a copy of each prior art document cited in this report.

1. Basis of the report

a. With regard to the language, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

The international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

b. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, see Box No. I.

2. Certain claims were found unsearchable (see Box No. II)

3. Unity of invention is lacking (see Box No. III)

4. With regard to the title,

the text is approved as submitted by the applicant.

the text has been established by this Authority to read as follows:

Refining surface and a blade segment for a refiner

5. With regard to the abstract,

the text is approved as submitted by the applicant.

the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box No. IV. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. With regard to the drawings,

a. the figure of the drawings to be published with the abstract is Figure No. 3 and 5

as suggested by the applicant.

as selected by this Authority, because the applicant failed to suggest a figure.

as selected by this Authority, because this figure better characterizes the invention.

b. none of the figures is to be published with the abstract.